CLAIMS

1. A planetary transmission (1), especially a dual-clutch transmission, constructed in a manner complementary to planetary gears, having a plurality of planetary gear sets (P1, P2, P3) with at least two frictional shifting elements (K1, K2) for the shifting into various power paths in a power flow and with a plurality of form-fit shifting element (A to F) for the attainment of various ratio stages within the said power paths, whereby the frictional shifting elements (K1, K2) and the shape-fit, shifting elements (A to F) are placed between shafts (S1 to S3, ST1 to ST3, HR1 to HR3) of the planetary gear sets (P1 to P4), also having a housing (2) as well as a transmission input shaft (3) and a transmission output shaft (4) and an enablement that a gear stage exchange, at least in the range of the lower gear stages namely ("1" to "4") can be carried out by means of the frictional shifting elements (K1, K2) without interruption of continuous traction, and whereby, at least one, of the frictional shifting elements (K1, K2) is serving as a clutch, therein characterized, in that the shape-fit, shifting elements (A to F), the frictional shifting elements (K1, K2) and the planetary gear sets (P1 and P3) are positioned within the said housing in such a manner can be so brought into communication with one another, that an activation of the shape-fit, shifting elements (A to F) can be effected without access through rotating parts.

2. A planetary transmission in accord with claim 1, therein characterized in that the frictional shifting elements (K1, k2) are placed between the shape-fit, shifting elements (A to F) and the planetary gear sets (P1 to P3), whereby the frictional gear elements (K1, K2) are directly connected, by means of their half-clutches, which are proximal to the transmission output, further with two different shafts (ST1, S1) of the planetary gear sets (P1 to P3) with their half-clutches, proximal to the transmission input, standing in an operational connection with the shape-fit, shifting elements (A to F).

3. A planetary transmission in accord with one of the claims 1 or 2, therein characterized, in that at least one of the frictional shifting elements is constructed to serve as a brake.

4. A planetary transmission in accord with one of the claims 1 to 3 , therein characterized, in that the frictional shifting elements (K1, K2) can be made to operate wet or dry.

5. A planetary transmission in accord with one of the claims 1 to 4, therein characterized, in that the shape-fit, shifting elements (A to F) are designed as synchronized shifting elements.

6. A planetary transmission in accord with one of the claims 1 to 5, therein characterized, in that the shape-fit, shifting elements (A to F) are positioned between a transmission input shaft (3) and the frictional shifting elements (K1, K2).

7. A planetary transmission in accord with one of the claims 1 to 6, therein characterized, in that the first planetary gear set (P1), a second planetary gear set (P2) and a third planetary gear set (P3) form a 3-carrier-6-shaft gear train unit.

8. A planetary transmission in accord with claim 7, therein characterized, in that a carrier (ST1) of the first planetary gear sets (P1) is bound to an internal gear (HR2) of the second planetary gear set (P2).

9. A planetary transmission in accord with claim 7 or 8, therein characterized, in that the internal gear (HR1) of the first planetary gear set (P1) is connected with a carrier (ST3) of the third planetary gear set (P3).

10. A planetary transmission in accord with one of the claims 7 to 9, therein characterized, in that the sun gear (S2) of the second planetary gear set (P2) is operationally bound to the transmission input shaft (3).

11. A planetary transmission in accord with one of the claims 7 to 10, therein characterized, in that the carrier (ST2) of the second planetary gear set (P2) is connected with an internal gear (HR3) of the third planetary gear set (P3).

12. A planetary transmission in accord with one of the claims 7 to 11, therein characterized, in that the carrier (ST3) of the third planetary set (P3) is connected to the transmission output shaft (4).

13. A planetary transmission in accord with one of the claims 7 to 12, therein characterized, in that by means of the first frictional shifting element (K1) a first shape-fit, shifting element (F) or a second shape-fit, shifting element (D) and the carrier (ST1) of the first planetary gear set (P1) can be brought into mutually effective connection.

14. A planetary transmission in accord with one of the claims 7 to 13, therein characterized, in that by means of the second frictional shifting element (K2) a first shape-fit, shifting element (B) or a second shape-fit element (C) and the sun gear (S1) of the first planetary gear set (P1) can be connected.

15. A planetary transmission in accord with one of the claims 7 to 14, therein characterized, in that the sun gear (S3) of the third planetary gear set (P3), by means of a shape-fit, shifting element (A) is connected to a housing affixed component (2).

16. A planetary transmission in accord with one of the claims 7 to 14, therein characterized, in that the sun gear (S3) of the third planetary gear set (P3), by means of a frictional shifting element (A'), advantageously, a brake, can be connected with a housing-affixed component (2).

17. A planetary transmission in accord with one of the claims 7 to 16, therein characterized, in that the transmission input shaft (3) can be connected with the second frictional shifting element (K2) by means of a shape-fit, shifting element (B).

18. A planetary transmission in accord with one of the claims 7 to 17, therein characterized, in that the second frictional shifting element (K2) can be connected with a housing-affixed component (2) by a shape-fit, shifting element (C).

19. A planetary transmission in accord with one of the claims 7 to 18, therein characterized, in that the first frictional shifting element (K1) can be connected with a housing-affixed component (2) by a shape-fit, shifting element (D).

20. A planetary transmission in accord with one of the claims 7 to 19, therein characterized, in that the transmission input shaft (3), by means of a

shape-fit, shifting element (E) can be connected with the carrier (ST1) of the first planetary gear set (P1) as well as with the internal gear (HR2) of the second planetary gear set (P2).

21. A planetary transmission in accord with one of the claims 7 to 19, therein characterized, in that the transmission input shaft (3), by means of a frictional shifting element (E'') can be connected with the carrier (ST1) of the first planetary gear set (P1) as well as with the internal gear (HR2) of the second planetary gear set (P2).

22. A planetary transmission in accord with one of the claims 7 to 21, therein characterized, in that the first frictional shifting element (K1), by means of a shape-fit, shifting element (F) can be connected with the internal gear (HR1) of the first planetary gear set (P1) as well as with the carrier (ST3) of the third planetary gear set (P3).

23. A planetary transmission in accord with one of the claims 7 to 22, therein characterized, in that the first frictional shifting element (K1), by means of two shape-fit, shifting elements (E' and B) can be connected with the transmission input shaft (3).